

Serial No. 09/846,254

REMARKS/ARGUMENTS

Prior to this Amendment, claims 1-93 were pending in the application.

Claim 1 is amended to include the limitations of claim 5, which is canceled, and to further indicate that the claimed network includes nodes that communicate events over an event channel and that each subscriber node includes a filter defined by an application on the node for identifying matching events, i.e., events to be received by the application. New dependent claim 94 is added to protect more clearly the concept that the network may include a number of subscriber nodes each opening the event channel and identifying matching events on the channel using a filter on each subscriber node.

Independent claim 12 is amended to include the limitations of dependent claims 13 and 23-26, which are canceled, to further distinguish the claimed network node from the teachings of the references of record in the case.

Claims 27-32 are canceled.

Independent claim 33 is amended to clarify the event channel feature of the invention and to include the limitations of claims 41 and 42, which are canceled.

Claims 44-61 are canceled.

Independent claim 62 is amended to more clearly claim the subject matter of the invention.

Independent claim 80 is amended to further distinguish the claimed method from the references of record in the case by including the limitations of claims 81-84, with dependent claims 81-84 being cancelled.

Claims 87-90, 92, and 93 are canceled.

After entry of this Amendment, claims 1-4, 6-12, 14-22, 33-40, 43, 62-80, 85, 86, 91, and 94 remain for consideration by the Examiner.

Serial No. 09/846,254
Reply to Office Action of September 9, 2004

Claim Rejections Under 35 U.S.C. §102

In the Office Action dated September 9, 2004, claims 1-13, 18-19, 21-30, 33-50, 62-69, 80-85, 87-90, and 93 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,477,585 ("Cohen"). This rejection is traversed based on the following remarks.

With regard to claim 1, the Office Action cites Cohen at col. 5, lines 48-49 for teaching the event channel of claim 1 and at col. 6, line 7 (consumer-side EMS filter) and col. 6, lines 19-22 for showing a filter to identify an event on the subscriber node. Applicants disagree with this construction of Cohen. At col. 5, lines 55-61 with reference to Figures 2 and 3, Cohen makes it clear that its event distribution method involves providing a single host computer running an event management system (EMS 22). According to Cohen, clients must subscribe to the EMS 22 and also define filters that are stored in a filter database 46 at the device hosting the EMS 22. Also, with reference to Figure 3, the event channel is shown to be part of the EMS 22.

As can be seen, Cohen fails to anticipate the network of claim 1 because it fails at least to show "an event channel adapted to transfer an event between a publisher node and a subscriber node within said network over the communication link", as the Cohen event channel is isolated within the EMS 22 and not present on a communication link. Further, Cohen fails to show "a filter on said subscriber node" because as can be seen in Figure 3 the event consumers 26 are remote to the EMS 22 which stores the filters in database 46. Further, Cohen fails to teach "an application...opens said event channel at said subscriber node." For at least these reasons, Cohen fails to support a rejection of claim 1, and the rejection should be withdrawn.

Claims 2-4 and 6-11 depend from claim 1 and are believed allowable as depending from an allowable base claim. Claim 94 also depends from claim 1 and is believed allowable as Cohen fails to teach a plurality of subscriber nodes each including a filter defined by an application on the node, opening an event channel

Serial No. 09/846,254
Reply to Office Action of September 9, 2004

over a communication link to each such node, and using the filter at each node to identify matching events for receipt by the application.

Regarding independent claim 12, the Office Action relies on Cohen to reject the claim in a manner similar to that of claim 1. Therefore, the reasons for allowing claim 1 over Cohen are applicable to claim 12. More specifically, Cohen fails to teach an event server on a node that subscribes to an event channel on a communication link for an application, and instead, Cohen teaches an event channel within a node. Cohen also fails to teach a queue on the same node that assigns the filter and receives and uses matching events. In contrast, the queue 47 is shown to be part of the EMS 22 and is placed on single host within a network as shown in Figures 2 and 3 (e.g., not on the consumer nodes 26). For these reasons, the rejection of claim 12 based on Cohen is not proper and should be withdrawn. Claims 13, 18, 19, 21, and 22 depend from claim 12 and are believed allowable as depending from an allowable base claim.

Independent claim 33 as amended calls for opening an event channel at a node that provides a shared communication path on a communication link and to subscribing to receive events at the node over the event channel. Cohen fails to teach these features as it describes (as discussed with reference to claim 1) running an EMS on a single node and then distributing events to specific nodes after filtering on the EMS node. The method of claim 33 is very different in that it supports fully asynchronous communication over the event channel without requiring an event publisher to provide addresses of receiving nodes. Claim 33 is also amended to clarify that the method includes running an application on the node, receiving and processing an event at the node over the event channel, and then when a match is determined "at said node" passing the received event to the application on the node. Distribution out of the node is not required after filtering as is the case in the Cohen method. For these reasons, claims 33 and claims 34-40 and 43, which depend from claim 33, are believed allowable over Cohen.

Independent claim 62 was rejected in the Office Action for the same reasons as provided for rejecting claim 1, and the reasons provided for allowing claim 1 over

Serial No. 09/846,254
Reply to Office Action of September 9, 2004

Cohen are applicable to claim 62. Further, Cohen fails to teach or suggest granting access to an event channel on a communication link and associating such access or permission to an application running on a node network. Hence, Cohen does not support a rejection of claim 62 or claims 63-69, which depend from claim 62, and these claims are believed in condition for allowance.

Independent claim 80 was rejected in the Office Action for the reasons provided for rejecting claim 1, and hence, the reasons provided for allowing claim 1 over Cohen are believed applicable to claim 80. Specifically, Cohen fails to teach using a client application for opening an event channel on the same node as is running the application and receiving and filtering events on the channel with a filter on the application's node. Further, Cohen fails to teach opening such an event channel in read and write modes as now called for in claim 80. Based on these arguments, claim 80 and claims 85 and 86, which depend from claim 80 are not shown or suggested by Cohen, and the rejection of these claims should be withdrawn.

Claim Rejections Under 35 U.S.C. §103

Also, in the September 9, 2004 Office Action, claims 14-17, 20, 51-61, 74-75, 78-79, 86, and 92 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen. This rejection is traversed based on the following remarks.

Claims 14-17 and 20 depend from claim 1 and are believed allowable as depending from an allowable base claim.

Claims 51-61 are canceled.

Regarding independent claim 74, the Office Action states that claim 74 is the same method as claim 1 and rejects it for the same reasons (except under 103). However, claim 74 includes differing limitations not included in claim 1. Specifically, the sending, marking, and filtering steps are not included or include differing language than provide in claim 1. Hence, the Examiner has failed to make out a proper case of obviousness because the Examiner has not provided explicit

Serial No. 09/846,254
Reply to Office Action of September 9, 2004

citations to Cohen where each and every limitation in the claim is shown or made obvious. As a result, claim 74 and claims 75, 78, and 79, which depend from claim 74, are believed in condition for allowance.

Claim 86 depends from claim 80 and is believed allowable as depending from an allowable base claim.

Claim 92 is canceled.

Further, in the Office Action, claims 31-32, 70-73, 76-77, and 91 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen in view of U.S. Pat. No. 6,314,533 ("Novik"). Claims 31-32 are canceled. The rejection of the other pending claims is traversed based on the following remarks.

Referring to independent claim 70, the Office Action states that this is the method of claim 1 and is rejected over Cohen for the same reasons. However, claim 70 includes "building a filter from a plurality of search trees" and other elements that are not included in claim 1. Hence, the Office Action has failed to provide a proper case of obviousness, and the rejection of claim 70 should be withdrawn or specific citations in Cohen for every element of the claim should be provided. Claims 71-73 depend from claim 70 and are believed allowable for at least the reasons provided for allowing claim 70.

Claims 76 and 77 depend from claim 74 and are believed allowable as depending from an allowable base claim. Further, Novik fails to overcome the deficiencies noted with reference to claim 74.

Regarding claim 91, the Office Action states that it has limitations similar to that of claim 70 and is rejected for the same reasons (i.e., based on Cohen for the reasons provided for rejecting claim 1). However, as with claim 70, the Office Action does not provide specific citations to Cohen in which this reference is supposed to teach each limitation as claim 1 differs from claims 70 and 91. Hence, a *prima facie* case of obviousness has not been made out by the Examiner, and Applicants respectfully request that the rejection of claim 91 based on Cohen be withdrawn.

Serial No. 09/846,254
Reply to Office Action of September 9, 2004

Conclusions

In view of all of the above, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

November 12, 2004



Kent A. Lembke, No. 44,866
Hogan & Hartson LLP
One Tabor Center
1200 17th Street, Suite 1500
Denver, Colorado 80202
(720) 406-5378 Tel
(720) 406-5301 Fax